

SCH4U – Unit 2 – Polymer Project Checklist

The following is a checklist that can help guide you as you finish writing your polymer project. If you have any questions, please let me know.

1. Necessary information:	
	<ul style="list-style-type: none"><input type="checkbox"/> Included my (student) name<input type="checkbox"/> Included, the date I will submit my project<input type="checkbox"/> Included a title relevant to the project
2. Introduction:	
	<ul style="list-style-type: none">• <i>If you have included more information than what is being asked in the checklist that is fine.</i>
	<ul style="list-style-type: none"><input type="checkbox"/> Included the name of the polymer chosen<input type="checkbox"/> Identified the type of polymer chosen<ul style="list-style-type: none">○ Natural, Synthetic<input type="checkbox"/> Included a brief overview of where/how the polymer is used<ul style="list-style-type: none">○ No need to explain the details at this point.<input type="checkbox"/> Included a brief overview of what will be discussed in the project <p><u>Can also add the following in your introduction:</u></p> <ul style="list-style-type: none"><input type="checkbox"/> Mentioned other names attributed to the polymer<ul style="list-style-type: none">○ Ex: chemical name, common (everyday) name.<input type="checkbox"/> Mentioned fun facts about the polymer
3. Monomer/unit:	
	<ul style="list-style-type: none"><input type="checkbox"/> Identified the atoms present in the monomer/unit<input type="checkbox"/> Identified the intramolecular forces present in the polymer<ul style="list-style-type: none">○ Provide examples of bonds that support the type of intramolecular forces mentioned.<input type="checkbox"/> Identified the intermolecular forces present in the polymer<ul style="list-style-type: none">○ Provide examples of where the different intermolecular forces can be present in the polymer.<input type="checkbox"/> Identified and justified the polarity of the unit/monomer<ul style="list-style-type: none">○ Why is it polar or nonpolar?○ Are there portions of the unit/monomer that are polar while others are nonpolar?
4. The polymer	
	<ul style="list-style-type: none"><input type="checkbox"/> Provided an illustration (drawing, picture, etc) of the polymer<ul style="list-style-type: none">○ Identify at least one of each monomer in the polymer in the illustration<input type="checkbox"/> Included a brief overview of how the polymer is formed.<ul style="list-style-type: none">○ The process (no need for the explicit mechanism of formation)<input type="checkbox"/> Identified the applications of the unit/monomer<ul style="list-style-type: none">○ What is the polymer used for? Why?○ Where is the polymer used? Why?<input type="checkbox"/> Explained how the intermolecular/intramolecular forces present in the polymer contribute to its applications.

5. Evaluate the applications of the polymer	
	<ul style="list-style-type: none"> <input type="checkbox"/> Identified and justified the impact of the polymer on technology, environment, and economics. <ul style="list-style-type: none"> ○ Example questions to ask yourself: <ul style="list-style-type: none"> ▪ Can the polymer be used to advance technology? Why? ▪ Is it a risk for the environment? Can it be used to help the environment? Why? <input type="checkbox"/> Identified, listed, and justified safer, greener, or more cost-effective alternatives (if they exist). <ul style="list-style-type: none"> ○ The polymer might not satisfy all three criteria (that's okay!). <ul style="list-style-type: none"> ▪ Example: The polymer might be green, safe, but not cost effective. ○ If no safer, greener, or more cost-effective alternatives exist, provide other alternatives that might not be safer, greener, or more cost-effective.
6. Conclusion	
	<ul style="list-style-type: none"> <input type="checkbox"/> Brief overview of what you discussed in your project <p><u>Can also add the following in your conclusion:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> What are the future prospects for the polymer <ul style="list-style-type: none"> ○ Any interesting future applications for the polymer? ○ Will they be making more of the polymer? ○ Do they want to stop production of the polymer?
7. References	
	<ul style="list-style-type: none"> <input type="checkbox"/> Included references at the end of the project <ul style="list-style-type: none"> ○ Listed the sources I used to help with writing my project. ○ Followed the APA format: <ul style="list-style-type: none"> ▪ See the SCH4U website for link to a useful resource that can be of help (Purdue OWL: https://owl.english.purdue.edu/owl/resource/560/01/)